California Guidelines for Chlamydia Screening and Diagnostic Testing Among Women in Family Planning and Primary Care Settings

These guidelines were developed by the California Department of Public Health (CDPH) Sexually Transmitted Diseases (STD) Control Branch in collaboration with California Chlamydia Action Coalition; Office of Family Planning -- Family Planning, Access, Care, and Treatment (Family PACT); California STD/HIV Prevention Training Center; and California STD Controllers Association

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Summary Guidelines

ROUTINE SCREENING AMONG YOUNG WOMEN AGE ≤ 25

Sexually active women 25 years of age and younger should be screened for chlamydia annually.

TARGETED SCREENING BASED ON RISK FACTORS AMONG WOMEN AGE > 25

Among women older than 25 years of age, routine screening is not recommended and should be targeted only to women with risk factors for chlamydia:

- infection with chlamydia or gonorrhea during the previous 2 years;
- more than one sex partner in the previous 12 months;
- new partner in the previous 3 months; or
- belief that a partner from the previous 12 months may have had other sex partners at the same time.

SCREENING/TESTING IN PREGNANCY

All pregnant women should be routinely screened for chlamydia at the first prenatal visit. Women age 25 and younger and those over age 25 with risk factors for chlamydia should be screened again during the third trimester to prevent maternal postnatal complications and chlamydial infection in the infant. A test of cure using a nucleic acid amplification test (NAAT) at three to four weeks is recommended in all pregnant women with chlamydia.

PREFERRED TESTS FOR SCREENING/TESTING

NAATs are the preferred test for detection of chlamydial infection and can be used with self- or clinician-collected vaginal swabs, cervical swabs, or urine specimens. If available, vaginal swabs are the preferred specimen type for screening.

DIAGNOSTIC TESTING

All women with clinical exam findings indicative of chlamydial infection, e.g., cervicitis or pelvic inflammatory disease (PID), should be tested for chlamydia.

TESTING OF STD CONTACTS

All women who report contact (exposure) to an STD, specifically chlamydia, gonorrhea, non gonococcal urethritis, epididymitis, trichomoniasis, syphilis, or HIV, should be tested for chlamydia.

TESTING AMONG WOMEN WITH A NEW STD DIAGNOSIS

All women with a newly diagnosed STD, either confirmed or presumptively treated, including gonorrhea, trichomoniasis, syphilis, or HIV, should be tested for chlamydia.

TREATMENT OF CHLAMYDIA

Recommended treatment for uncomplicated chlamydial infection in non-pregnant women is azithromycin 1 gram in a single dose by mouth, or doxycycline 100 mg taken twice a day by mouth for seven days. Recommended treatment for pregnant women is azithromycin 1 gram in a single dose by mouth, or amoxicillin 500 mg taken three times a day by mouth for seven days.

PARTNER MANAGEMENT

Partners of women with laboratory-confirmed or presumptive chlamydial or gonorrhea infections (including cervicitis and PID) should be notified in a timely manner and treated with recommended antibiotic therapy. Treatment should be provided to all partners who had sexual contact with the patient during the 60 days prior to diagnosis. If the patient's last sexual contact was over 60 days prior to diagnosis, the most recent sexual partner should be treated.

REPEAT TESTING AFTER TREATMENT

All women who test positive for chlamydia should be tested for repeat infection approximately three months after treatment. Women who do not return for a repeat test at the recommended time should be tested whenever they next seek medical care, regardless of whether or not they believe their sex partners were treated. Repeat testing is distinct from a test-of-cure. A test-of-cure is not needed unless the patient is pregnant, compliance is in question, or symptoms persist after treatment.

REPORTING REQUIREMENTS

Chlamydia is a reportable condition in California. The California Code of Regulations mandates provider reporting of all chlamydial and gonorrhea infections and all cases of PID to the local health department within seven calendar days of identification. Laboratories are also required to report all cases of chlamydia and gonorrhea.

Background and Rationale

These guidelines address chlamydia screening for female clients in clinical settings that provide reproductive health services, including family planning, gynecology, teen and school-based health centers, and primary care settings. In certain high-risk settings (e.g., STD clinics, correctional institutions), more frequent screening and/or screening of a broader segment of the population may be warranted.

The recommendations included in this document are meant to serve as a source of clinical guidance: health-care providers should always consider the individual clinical circumstances of each person in the context of local disease prevalence.

RATIONALE FOR CHLAMYDIA SCREENING
1. Because the majority of women with chlamydial infections have no symptoms or signs, screening is essential for detecting infection.[1]
2. Unrecognized infection with chlamydia can lead to adverse reproductive health sequelae, including PID, chronic pelvic pain, ectopic pregnancy, and tubal infertility.[2] Infection with chlamydia also increases the risk of transmitting and acquiring HIV.[3]
3. NAATs, which are the most commonly used diagnostic tests for chlamydia, are accurate, relatively inexpensive, and noninvasive.[4]
4. Antibiotic therapy cures infection in the vast majority of those treated, prevents the development of complications, and interrupts further transmission to sex partners.[5]
5. Screening for chlamydia has been demonstrated to reduce PID.[6]
6. Annual chlamydia screening for sexually active adolescent and young adult women has been shown to be cost effective for preventing adverse sequelae.[7-9]

CLINICAL ASPECTS OF CHLAMYDIAL INFECTION

Chlamydia trachomatis can infect urethral, cervical, rectal, and pharyngeal sites. Most infections with chlamydia are asymptomatic and without clinical signs. When symptomatic, cervical chlamydial infection may cause nonspecific vaginal discharge, post-coital bleeding, or intermenstrual vaginal bleeding. Clinical evidence of cervicitis includes endocervical mucopus and/or friability (easily induced bleeding).[10]

In women, untreated cervical infection can spread into the uterus or fallopian tubes and cause PID. This occurs in up to 40 percent of women with untreated chlamydia.[11] PID can cause scarring of the fallopian tubes, uterus, and surrounding tissues, which can lead to chronic pelvic pain, infertility, and potentially fatal ectopic pregnancy. Women infected with chlamydia are up to five times more likely to become infected with HIV if exposed.[3,12] Rarely, chlamydia in women may present with signs or symptoms of urethritis (dysuria/pyuria), Reiter's syndrome (reactive arthritis, urethritis, and conjunctivitis), Fitz-Hugh Curtis syndrome (perihepatitis), or proctitis.

In pregnant women, there is some evidence that untreated chlamydial infections can lead to premature delivery.[13] Babies who are born to infected mothers can acquire chlamydial infections, causing conjunctivitis and pneumonia.[14]

INCIDENCE AND PREVALENCE OF CHLAMYDIA

Chlamydia is the most common bacterial STD in the United States, with an estimated 2.8 million new cases annually.[15] From 2003 through 2009, the incidence rate of reported chlamydial infection in women increased by 27 percent, from 464 to 592 cases per 100,000 females.[16] This increase in reported cases likely represents the expansion of screening and the increased use of more sensitive screening tests, though it also may reflect a true increase in morbidity.

In California, over 100,000 cases of chlamydia were reported for women in 2009, giving an incidence rate of 522 cases per 100,000 females.[17] Of these, more than 70,000, or 70 percent of all female cases, were reported in young women aged 15 to 24, giving an incidence rate in this population of 2,484 per 100,000.

Although the prevalence of chlamydia varies widely among communities and client populations, nationally and across multiple clinic settings in California, infection is highest among sexually active adolescent females and young women. In a national sample of adolescents and adults aged 14 to 39 years, chlamydia prevalence among females was 2.5 percent.[18] National data from family planning clinics in 2009 demonstrated a median chlamydia prevalence of 7.5 percent among females aged 15 to 24.[16]

In most family planning and primary care settings in California, chlamydia prevalence among females up to age 25 years is sufficiently high to warrant screening.[17] According to prevalence monitoring data collected in 2009 from the California Infertility Prevention Project (IPP) family planning sites, the prevalence of chlamydia was 8.2 percent among adolescent females aged 15 to 19, and 6.1 percent in females aged 20 to 24 years (Figure 1).[17]

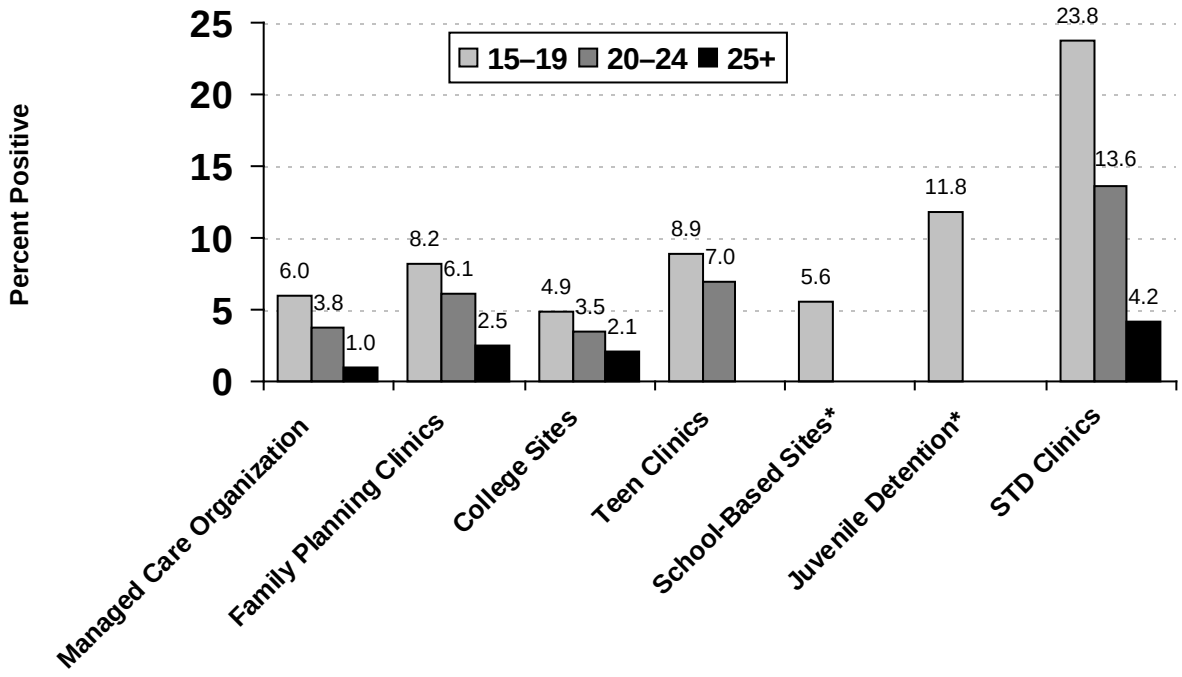
According to California prevalence monitoring data from managed care settings in 2009, chlamydia prevalence among all women was 3.5 percent: 6.0 percent among females aged 15 to 19 years, 3.8 percent among females aged 20 to 24 years, and 1.9 percent among females aged 25 years and older.[17]

High rates of chlamydia among women attending California categorical STD clinics continue to warrant screening in most age groups.[17] California IPP prevalence

monitoring data also demonstrate that prevalence among females in juvenile detention centers, certain school-based sites, and teen clinics warrants routine screening in these settings. However, low rates of chlamydia among women over age 25 in managed care organizations and other primary care settings, family planning settings, and college health centers do not support routine screening within this age group.[17] (Please see Figure 1.)

The most current national and California statistics on chlamydia rates are available on the Centers for Disease Control and Prevention (CDC) STD Surveillance and CDPH STD Control Branch web sites.[19, 20]

Figure 1. Chlamydia Prevalence Monitoring, Percent Positive for Females by Age Group and Health Care Setting, California, 2009



* These venues primarily serve adolescents.

Source: California Department of Public Health, STD Control Branch; Los Angeles IPP; and San Francisco IPP

RISK FACTORS FOR CHLAMYDIA

Understanding the demographic and behavioral risk factors for chlamydial infection informs screening decisions. Thus, a thorough risk assessment is essential for all clients in clinical settings that provide reproductive health services and should be obtained at least annually with updates requested for important risk factors at every visit. One of the most consistent risk factors for chlamydial infection has been young age.[21] In general, sexually active adolescents have the highest prevalence of infection, followed by women aged 20 to 25 years. Adolescents who report high-risk behaviors (e.g., multiple partners and inconsistent condom use),

may benefit from chlamydia screening more frequently than once a year (e.g., every six months).[22]

Asymptomatic clients over age 25 who request testing for chlamydia should undergo a thorough risk assessment to determine whether or not screening is indicated. A request for STD testing is not in and of itself an adequate indication for performing a chlamydia test. Recent research in California family planning clinics showed that a patient's request for chlamydia testing was not associated with infection.[23]

In some individual health care sites or settings, documented higher prevalence of chlamydia in older age groups of women may warrant that routine screening be expanded to those above age 25 (e.g., up to age 30). Both CDC and the California STD Control Branch advocate that routine screening be offered only to female client populations over age 25 that have a demonstrated chlamydia prevalence of three percent or higher. The three percent cut-off has been determined after review of cost-effectiveness analyses[24] and consideration of laboratory test performance, including the expected rates of false-positive results. Sources of clinic prevalence data may include laboratory reports or clinic logs. Laboratories monitor the number of tests performed in a given period of time, the test results, and selected client demographics (e.g., age or date of birth). These data can be used to estimate prevalence among specific groups and guide screening practices. A sample Chlamydia Test Volume and Positivity Data Form has been attached as an appendix to this document and can be used to obtain data from your laboratory summarizing your chlamydia-tested and -positive clients by age and gender. If prevalence is found to be below three percent, then screening should be more targeted; and if the prevalence is above three percent, then routine screening should be maintained or expanded.

Having a sex partner with other, concurrent sex partners is a strong predictor of STD infection, including infection with chlamydia.[25, 26] Recent research in California family planning clinics showed that women over 25 years of age who indicated that it was *possible* that a partner they had had during the past 12 months could have had other partners at the same time, had a 4.5-fold greater risk of testing positive for chlamydia compared with those who said it was *unlikely* that this was the case.[23] Additional behavioral risk factors for chlamydia include having multiple sex partners (e.g., more than one partner during the past 12 months), and having a recent new sex partner (e.g., during the past three months).[23] Detailed guides to sexual history taking are available from the CAPTC and CDC.[5, 27]

Numerous studies have consistently found that history of recent chlamydia or gonorrhea infection or PID is associated with a repeat chlamydia infection.[28 29] This finding is the basis for the recommendation to re-test patients approximately three months after treatment; however, some research has found that risk of repeat infection remains high for 24 months or longer after the initial infection.[30-33]

While chlamydia is common among women of all races and ethnic groups, multiple sources of data demonstrate disproportionately high rates of chlamydia among certain racial/ethnic groups. Nationally and in California, chlamydia rates are eight times higher in African American women compared to those in white women.[16,17] The 2009 chlamydia rate in African American females aged 15 to 19 in California

was the highest of any racial/ethnic or age group at 6,475 per 100,000; the rate in non-Hispanic white females of the same age group was 814. The 2009 overall chlamydia rate among Californian Hispanic females was three times that of non-Hispanic whites, while the rate among American Indian/Alaska Native females was double the rate among non-Hispanic whites. The rate among Asian/Pacific Islander females was equivalent to that of non-Hispanic whites.[17] These disparate rates among African-American, American Indian/ Alaska Native, and Hispanic women have also been observed in population-based prevalence studies.[18, 34]

SCREENING/TESTING IN PREGNANCY

Chlamydial infection during pregnancy has been associated with preterm labor and delivery.[13] Additionally, babies who are born to infected mothers can acquire chlamydial infections, causing conjunctivitis and pneumonia.[14] Therefore, all pregnant women should be routinely screened for chlamydia at the first prenatal visit. Women age 25 and younger and women over age 25 who have risk factors for chlamydia (see above: **Risk Factors for Chlamydia**) should be screened again during the third trimester. A test-of-cure at three to four weeks is recommended in all pregnant women with chlamydia.

DIAGNOSTIC TESTING BASED ON CLINICAL SIGNS/SYMPTOMS

While decisions about screening of asymptomatic patients should be made based on the patient's age or other risk factors, laboratory-based diagnostic testing for chlamydia and gonorrhea is warranted in women of all ages when clinical exam findings are suggestive of chlamydial infection.[35] Chlamydial infection in women causes relatively nonspecific symptoms; therefore, patient complaint of symptoms alone should not be used to direct diagnostic workup and treatment. In women with non-specific symptoms, such as vaginal discharge, intermenstrual bleeding, pelvic pain, or dyspareunia, testing may not be warranted unless other risk factors or clinical signs for chlamydia are present. After conducting a thorough risk assessment, symptomatic clients should receive a pelvic examination to look for more specific clinical indications of infection.

Clinical syndromes that may be indicative of chlamydial infection include cervicitis and PID. Although the positive predictive value of these clinical syndromes being indicative of an underlying infection with chlamydia or gonorrhea is higher in younger women, diagnostic testing for both chlamydia and gonorrhea is recommended for women of all age groups who present with clinical signs of cervicitis or PID.[36]

Cervicitis is characterized by mucopurulent endocervical discharge or cervical friability. According to CDC, patients diagnosed with a new episode of cervicitis should be tested for chlamydia and gonorrhea. Presumptive treatment for cervicitis with antibiotics for *C. trachomatis* should be provided in women at increased risk for chlamydia (e.g., age ≤25 years, infection with chlamydia or gonorrhea during previous two years, new or multiple sex partners, or a recent partner suspected to have had concurrent sex partners), or if follow-up is in question, or if a relatively insensitive diagnostic test (not a NAAT) is used. Concurrent presumptive therapy

for *N. gonorrhoeae* is indicated for women with cervicitis if the prevalence of gonorrhea is high in the patient population (>5 percent),[5] or if follow-up is in question, or if a relatively insensitive diagnostic test (not a NAAT) is used. Cervical Gram stain is not recommended in the diagnostic workup of cervicitis.

The clinical diagnosis of acute PID is imprecise. Empiric treatment of PID should be initiated in sexually active young women and other women at risk for STDs if they are experiencing pelvic or lower abdominal pain, if no cause for the illness other than PID can be identified, and if one or more of the following minimum criteria are present on pelvic examination: cervical motion tenderness or uterine tenderness or adnexal tenderness.

The requirement that all three minimum criteria be present before the initiation of empiric treatment could result in insufficient sensitivity for the diagnosis of PID. Because of the difficulty of diagnosis and the potential for damage to the reproductive health of women with even mild or subclinical PID, health care providers should maintain a low threshold of suspicion for the diagnosis of PID. All women with suspected PID should be tested for chlamydia and gonorrhea and presumptively treated at the time of presentation. CDC guidelines recommend that PID treatment provide broad-spectrum coverage of likely pathogens, including *C. trachomatis, N. gonorrheae*, anaerobes, *G.vaginalis*, enteric Gram-negative rods, *H. influenzae, and S. agalactiae*.[5] PID is a reportable condition in California. Any woman presumptively treated for PID should be reported by the provider to the local health department where the patient resides (see below: "Reporting chlamydia cases").

TESTING PATIENTS WHO ARE STD CONTACTS OR WHO HAVE A NEW STD DIAGNOSIS

Patients who report recent exposure to an STD or who have a new STD diagnosis are at high risk for infection with chlamydia and gonorrhea.[37] Thus, testing for chlamydia is appropriate for clients who report contact to an STD, specifically, chlamydia, gonorrhea, nongonococcal urethritis, epididymitis, trichomoniasis, syphilis, or HIV. In addition to testing, STD contacts should be presumptively treated for the STD to which they were exposed, according to CDC guidelines.[5] Additionally, clients with a newly diagnosed STD, either confirmed or presumptively treated, including gonorrhea, trichomoniasis, syphilis, or HIV, should be tested for chlamydia.

DIAGNOSTIC TESTS FOR CHLAMYDIA

Tests for chlamydia include NAATs, non-amplified probe tests, and culture. NAATs are the preferred test for chlamydia, as they are significantly more sensitive for detection of chlamydial infection than other test types. In addition to cervical specimens, NAATs can be used on urine and self-collected vaginal swab specimens, making a pelvic exam unnecessary. If available, self- or clinician-collected vaginal swabs are the preferred specimen type for screening.[38] As of May 2011, available NAATs for chlamydia testing include GenProbe Aptima Combo2™, Becton Dickinson ProbeTec™CT/GC, Roche COBAS AMPLICOR™ and Abbott Realtime™ CT/NG assay.

All NAATs offer the advantage of chlamydia/gonorrhea combination testing. The GenProbe PACE 2™, which will be discontinued as of December 2012, and Digene HC2™ are non-amplified probe tests.

TREATMENT OF CHLAMYDIA

RECOMMENDED TREATMENT FOR UNCOMPLICATED CHLAMYDIAL INFECTION	
In non-pregnant women and in men: Azithromycin 1 gram in a single dose by mouth, ***OR*** Doxycycline 100 mg taken twice a day by mouth for seven days.	**In pregnant women:** Azithromycin 1 gram in a single dose by mouth*, ***OR*** Amoxicillin 500 mg taken three times a day by mouth for seven days.

*Azithromycin is the preferred antibiotic to use in pregnancy because of superior efficacy and fewer side effects when compared with amoxicillin.

Specifications for alternative treatment regimens for chlamydia can be found in the CDC 2010 STD Treatment Guidelines.[5]

In order to maximize compliance, medications for chlamydial infections should be dispensed on-site when possible, and the first dose should be directly observed. To minimize transmission, persons who are treated for chlamydia should be instructed to abstain from sexual intercourse for seven days after a single dose therapy or until the end of a seven-day therapy. To minimize risk for repeat infection, patients should also refrain from sexual intercourse until all of their sexual partners are treated (i.e., for seven days after a single dose therapy or until the end of a seven-day therapy).

The above recommended treatment regimens are considered to be highly efficacious, and a routine test-of-cure for chlamydia is not necessary or recommended except in pregnant women. However, if compliance with treatment is in question or symptoms persist, a test-of-cure may be warranted.

CO-INFECTION WITH GONORRHEA

During the period 1999 to 2002, approximately 6.8 percent of US women age 14 to 39 with a chlamydial infection were also co-infected with gonorrhea.[18] Because the prevalence of gonorrhea among chlamydia-infected women is generally low, it is not necessary to presumptively treat all chlamydia-infected clients for gonococcal infection. However, testing these clients for gonorrhea and other STDs remains important, as a gonorrhea co-infection rate of 5 to10 percent is not insignificant.

MANAGEMENT OF SEX PARTNERS

Many repeat infections occur because of re-exposure to untreated sex partners.[39] An essential component in the clinical management of persons with laboratory-confirmed or presumptive chlamydial or gonococcal infections (including urethritis, cervicitis, and PID) includes notification and treatment of the patient's current and recent sex partner(s). Timely and recommended antibiotic treatment needs to be provided to all partners who had sexual contact with the patient during the 60 days prior to diagnosis. If the patient's last sexual contact was over 60 days prior to diagnosis, the most recent sexual partner should be treated. Regardless of their current marital or relationship status, all patients diagnosed with chlamydia (or gonorrhea) should specifically be asked about other sexual partners they may have had during the past 60 days.

For patients with laboratory-confirmed chlamydia only, partners should be treated for chlamydia. For patients testing positive for both chlamydia and gonorrhea, or for those who have clinical signs on exam indicating cervicitis or PID, partners should be empirically treated for both chlamydia and gonorrhea.

Allowing a patient to choose the partner notification method or combination of methods that are most acceptable to and appropriate for her and each of her partners will increase the likelihood of getting all potentially infected partners treated. Therefore, each patient with chlamydia or a syndrome associated with chlamydia or gonorrhea should be provided with a variety of partner notification and treatment options and should be assisted in developing a plan for informing each partner.

Based on recent research in California family planning settings, the most effective methods include patient/partner simultaneous in-clinic treatment and expedited partner treatment (EPT).[40] Simultaneous in-clinic treatment (or BYOP, for "Bring Your Own Partner") is accomplished by asking the patient to bring her partner to the clinic with her when she comes in for treatment, so that both the patient and partner can be treated at the same visit. This request can be encouraged at the time the patient is first notified of her positive test result, usually via the telephone. This option has multiple benefits, including furnishing the clinician with the opportunity to evaluate, test, and counsel the partner while providing empirical treatment. By providing concurrent treatment to the patient and her partner, the likelihood of passing the infection back and forth is reduced. Additionally, confidential counseling of the partner provides the opportunity to discreetly assess whether the partner has additional sex partners other than the index patient, and, if so, to provide the partner with medicine packs to distribute to these other partners (patient-delivered partner therapy, or PDPT, as described below).

For EPT, empirical partner treatment is given without a provider evaluation. One EPT option that is both effective and safe is PDPT, where patients are given medication (preferred) or a prescription to deliver to their partner(s) for empirical treatment.[41,42] Several research studies, including randomized clinical trials, have clearly shown that PDPT is effective in facilitating partner notification and reducing recurrent infection among index cases.[43] Given its demonstrated efficacy in preventing repeat infection, CDC supports the use of PDPT.[44] In California, the use of PDPT has been

legally allowable for chlamydia since 2001 and for gonorrhea since 2007. State guidance about use of PDPT is available online.[42] This partner treatment option is especially feasible and effective for patients who have ongoing contact with their partners yet believe they may be unable or unwilling to access care in a timely fashion, and for patients who have more than one partner.

These and other partner notification and treatment options are described in more detail in the document entitled: *Best Practices for the Prevention and Early Detection of Repeat Chlamydia and Gonococcal Infections: Effective Partner Treatment and Patient Retesting Strategies for Implementation in California Health Care Settings* (see below: **Online resources**).

REPEAT TESTING AFTER TREATMENT

Women infected and treated for chlamydia are at high risk for repeat chlamydial infection, with repeat infection rates often twice the baseline prevalence rates within a given patient population. Having a second infection with chlamydia confers an elevated risk for reproductive complications when compared to the initial infection, including a four-fold risk for PID and a two-fold risk for ectopic pregnancy.[45] Numerous studies in various clinical settings, including family planning sites, have documented chlamydia repeat infection rates that range from 10 to 15 percent at three to six months post-treatment.[46] Most cases are not the result of treatment failure, but rather of repeat infection.

Repeat testing at approximately three months post-treatment is strongly recommended, as it is expected to capture a high proportion of those who have been re-infected. Repeat testing should occur regardless of whether or not the patient believes that all of her sex partners were treated. While patients should be counseled to return to the clinic for repeat testing three months after treatment, repeat testing can be performed opportunistically whenever the patient next seeks medical care in the 1 to12 months following treatment, regardless of her reason for visit. Repeat testing of cases should *not* occur less than three weeks post-treatment due to the risk of false-positive test results when using NAATs. It is also important to note that repeat testing is distinct from a test-of-cure, which is not recommended unless compliance is in question, symptoms persist, or the patient is pregnant.

REPORTING CHLAMYDIA CASES

Chlamydia is a reportable condition in California. The California Code of Regulations mandates that medical providers report all chlamydial and gonococcal infections, including repeat cases, and all cases of PID to the local health department where the patient resides within seven calendar days of identification.[47-49] Laboratories are also required to report all cases of chlamydia and gonorrhea to the local health department.[50] California chlamydia data stratified by gender, age, race/ethnicity, and local health jurisdiction can be found on the web at **www.std.ca.gov**.

REPORTING PID

PID is also a reportable condition in California. Below is the case definition:

CASE DEFINITION OF PID	
Clinical description	A clinical condition among sexually active women characterized by pelvic or lower abdominal pain, with no cause for the illness other than PID identified.
Laboratory criteria for diagnosis	None
Case classification	Probable: A sexually active woman with pelvic or lower abdominal pain, with no cause for the illness other than PID identified with one or more of the following minimum criteria present on pelvic examination: cervical motion tenderness *OR* uterine tenderness *OR* adnexal tenderness; *AND* treated for PID by a medical provider.

OTHER GUIDELINES

CDC recommends chlamydia screening for all women 25 years of age and younger, all pregnant women, and older women at increased risk (e.g., those who have a new sex partner or multiple sex partners).[5] CDC has developed national guidelines for STD screening in pregnant women, adolescents, men who have sex with men women who have sex with women, victims of sexual assault, and those in correctional facilities.[5] Guidelines for STD screening in HIV-infected clients also have been published.[51]

The U.S. Preventive Services Task Force (USPSTF) recommends that clinicians screen all sexually active women, including pregnant women, for chlamydia if they are at increased risk for infection. Specified risk factors include young age (24 years of age or younger), history of previous chlamydial or other sexually transmitted infection, new or multiple sexual partners, inconsistent condom use, and exchanging sex for money or drugs. The 24-year-old age cutoff used by USPSTF differs from the one used by CDC because prevalence data specifically for 25-year-old women was not available to the committee. Data from California support the CDC-recommended age cutoff of 25 years. The USPSTF also noted that African American and Hispanic women have a higher prevalence of infection than the

general population in many communities and settings. These guidelines note that higher prevalence rates are also found in incarcerated populations, military recruits, and patients of public STD clinics.[52]

Online Resources

California Department of Public Health, STD Control Branch: www.std.ca.gov

- California STD Treatment Guidelines for Adults and Adolescents, 2010
- California STD Screening Recommendations, 2010
- Sexual Risk Assessment and Risk Factors for Sexually Transmitted Diseases and the Clinician's Guide to Sexual History Taking
- Patient-Delivered Partner Therapy for *Chlamydia trachomatis* and *Neisseria gonorrhoeae*: Guidance for Medical Providers in California
- Best Practices for the Prevention and Early Detection of Repeat Chlamydial and Gonococcal Infections: Effective Partner Treatment and Patient Retesting Strategies for Implementation in California Health Care Setting
- California Guidelines for Gonorrhea Screening and Diagnostic Testing Among Women in Family Planning and Primary Care Settings

California HIV/STD Prevention Training Center: https://www.stdhivtraining.org/

Centers for Disease Control and Prevention, *STD Treatment Guidelines, 2010*: http://www.cdc.gov/std/treatment/2010/default.htm

U.S. Prevention Services Task Force, *Screening for Chlamydial Infection: U.S. Preventive Services Task Force Recommendation Statement, 2007*: http://www.uspreventiveservicestaskforce.org/uspstf/uspschlm.htm

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APPENDIX A

Chlamydia Test Volume and Positivity Data

Provider

Name: _____

Address: _____

Phone #: _____

Laboratory

Name: _____

Address: _____

Phone #: _____

Contact: _____

Timeframe of Data

From: / / To: / /

(include all data available from the past 12 months)

Female Clients	# CT Tests	# CT Positive	# CT Negative	# Unspecified*	% Ct Positive§
Age ≤ 25 years					
Age 26 – 30 years					
Age > 30 years					

* "Unspecified" includes unsatisfactory, indeterminate, and/or missing results

§ % Ct Positive = # Ct Positive / (# Ct Tests - # Unspecified)